

subjecting the water vapor and raw water in the raw water tank to heat exchange and obtain distilled water;

a distilled water tank connected to said condenser for receiving and storing said distilled water;

vacuum means associated with said evaporation can for evacuating said evaporation can and depressurizing an inside thereof for a predetermined period upon starting of a desalinating operation so as to promote generation of water vapor in said evaporation can; and

raw water supply means provided at said evaporation can for externally supplying raw water into said evaporation can.

24. (New) A desalination apparatus comprising:

at least one evaporation can;

a heat exchanger placed in raw water in said evaporation can so as to subject low-temperature waste supplied directly or indirectly to said heat exchanger and raw water in the evaporation can to heat exchange and generate water vapor in the evaporation can;

a condenser connected to said evaporation can so as to receive the water vapor from said evaporation can, cool the water vapor by subjecting the water vapor and cooling water to heat exchange and obtain distilled water;

a distilled water tank connected to said condenser for receiving and storing said distilled water;

vacuum means associated with said evaporation can for evacuating said evaporation can and depressurizing an inside thereof for a predetermined period upon starting of a desalinating operation so as to promote generation of water vapor in said evaporation can; and

raw water supply means provided at said evaporation can for externally supplying raw water to said evaporation can.

25. (New) A desalination apparatus according to claim 23 or 24, wherein said apparatus is associated with a steam turbine for electric power generation in a plant to receive potential heat of exhaust steam from said steam turbine as said low temperature waste heat.

B' 26. (New) A desalination apparatus according to claim 25, wherein said desalination apparatus is incorporated in series or parallel to a condenser of said steam turbine for electric power generation.

27. (New) A desalination apparatus according to claim 25, wherein said desalination apparatus is used for electric power generation.

28. (New) A desalination apparatus according to claim 23 or 24, wherein said at least one evaporation can comprises a plurality of evaporation cans, said heat exchanger is connected to a first evaporation can, said condenser is connected to a final evaporation can, and a further condenser is connected to an upstream side evaporation can and placed in raw water in a down-stream side evaporation can in each pair of adjacent evaporation cans, so that said further condenser receives water vapor from said upstream side evaporation can, cool the water vapor with raw water in said downstream-side evaporation can and thereby produce distilled water, and also heats the raw water in said downstream side evaporation can and generates raw water.

29. (New) A desalination apparatus according to claim 23 or 24, further comprising a control means for controlling evacuating operation of said vacuum means and opening and closing of a control valve connected to said evacuation can for supplying raw water into said evaporation can and a control valve for opening said evaporation can to the atmosphere.

30. (New) A desalination apparatus according to claim 29, wherein said control means is so arranged that it controls said vacuum means and said control valves so that an evacuating of said evaporation can and an opening of said evaporation can to the atmosphere are intermittently repeated.

31. (New) A desalination apparatus according to claim 29, wherein said at least one evacuation can comprises a plurality of evaporation can which are disposed in parallel rows each consisting of at least one evaporation can, said control means is so arranged that it controls said vacuum pump and said control valves in such a way that said evaporation cans in all said rows do not simultaneously open to the atmosphere, thereby enabling a continuous operation.

B1 32. (New) A desalination apparatus according to claim 29, wherein said raw water supply means is formed by said vacuum means and said control valve connected to a lower part of said evaporation can that is opened or closed by said control means. *first as there is a second control valve in the 29.*

33. (New) A desalination apparatus according to claim 29, wherein said control valve for opening said evacuation can to the atmosphere forms concentrated raw water discharge means for discharging concentrated raw water from said evaporation can.

34. (Amended) A desalination apparatus according to claim 33, wherein said concentrated raw water discharge means is connected to a lower part of said evaporation can that is opened or closed by said control means.

35. (Amended) A desalination apparatus according to claim 23 or 24, wherein said evaporation can, heat exchanger, condenser, distilled water tank, vacuum means and raw water supply means are assembled in a single frame as a unit.

36. (Amended) A desalination apparatus according to claim 33, wherein said evaporation can, heat exchanger, condenser, distilled water tank, vacuum means, raw water